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Intensive Archeological Survey Of Old Airport Road At Burgess Creek In Parker County, Texas

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Intensive Archeological Survey Of Old Airport Road At Burgess Creek In Parker County, Texas

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INTENSIVE ARCHEOLOGICAL SURVEY OF OLD AIRPORT ROAD AT BURGESS CREEK IN PARKER COUNTY, TEXAS

CSJ: 0902-38-062



by

Brandon S. Young and Timothy B. Griffith, Ph.D.
with a contribution by Maryellen Russo

Texas Antiquities Permit No. 6014
Principal Investigator:
Brandon S. Young

October 2016



ENVIRONMENTAL CONSULTING • PLANNING • PROJECT MANAGEMENT

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Prepared for

AGUIRRE & FIELDS, LP

and



October 2016

ABSTRACT

On August 10 and 11, 2011, Blanton & Associates, Inc. (B&A) conducted an intensive non-collection archeological survey (augmented by backhoe trenching) at the request of Aguirre & Fields, LP and on behalf of the Texas Department of Transportation's (TxDOT) Ft. Worth District, of Old Airport Road at Burgess Creek in Parker County Texas (CSJ: 0902-38-062). Investigations occurred prior to proposed roadway improvements including the relocation of approximately 1,600 feet of Old Airport Road southwest of its existing location and a new bridge at Burgess Creek. Survey efforts discovered two historic archeological sites; 41PR147 and 41PR148. Site 41PR147 is a hand-dug water well and 41PR148 consists of three soil erosion control structures likely constructed by the Civilian Conservation Corps (CCC) in the mid to late 1930s. Given the lack of any unusual construction technique or design, no associated surface or subsurface artifact scatter, and no associated features, it is B&A's opinion that 41PR147 cannot provide any new or important information and is not, therefore, eligible for inclusion to the National Register of Historic Places (NRHP) or worthy of State Archeological Landmark (SAL) designation. It is also the opinion of B&A that the NRHP and SAL eligibility of site 41PR148 is currently unknown. Based on the above data, B&A recommends that the proposed construction at 41PR147 should be allowed to proceed as planned without additional investigations, as no archeological historic properties eligible for inclusion to the NRHP or sites warranting SAL designation would be affected by the project. B&A further recommends that because the eligibility of site 41PR148 for inclusion to the National Register of Historic Places is currently unknown, it should be avoided by the proposed construction. No artifacts were collected during the current survey. Project records and a copy of the final report will be curated at the Center for Archaeological Research (CAR) at The University of Texas at San Antonio.

MANAGEMENT SUMMARY

PROJECT TITLE: Intensive Archeological Survey of Old Airport Road at Burgess Creek in Parker County, Texas (CSJ: 0902-38-062).

PROJECT DESCRIPTION: On August 10 and 11, 2011, Blanton & Associates, Inc. (B&A) conducted an intensive non-collection archeological survey (augmented by backhoe trenching) at the request of Aguirre & Fields, LP and on behalf of the Texas Department of Transportation's (TxDOT) Ft. Worth District, of Old Airport Road at Burgess Creek in Parker County, Texas (CSJ: 0902-38-062). Investigations occurred prior to proposed roadway improvements that include the widening and relocation of approximately 1,600 feet of Old Airport Road southwest of its existing location, as well as the construction of a new bridge at the new proposed crossing of Burgess Creek.

The overall Area of Potential Effect (APE) for the proposed construction is approximately 1,600 feet long, a maximum of 120 feet wide, and encompasses approximately 4.969 acres (3.795 acres of proposed ROW and 1.174 acres of existing ROW). Vertical impacts would extend a maximum depth of approximately 43 feet below the ground surface for bridge supports and two to three feet for roadway construction. Available construction plans indicate that there would be no temporary or permanent easements required.

PROJECT LOCATION: The proposed project area is in south-central Parker County approximately seven miles southeast of Weatherford, Texas (USGS 7.5-minute *Annetta, Texas* topographic quadrangle)

TOTAL ACREAGE: Approximately 4.9 acres

DATES OF WORK: August 10 and 11, 2011

PURPOSE OF WORK: Blanton & Associates, Inc. assisted the project sponsor in compliance with Section 106 of the National Historic Preservation Act of 1966 (and subsequent amendments) and the Antiquities Code of Texas

PRINCIPAL INVESTIGATOR: Brandon S. Young

PROJECT ARCHEOLOGIST: Joseph M. Sanchez

TEXAS ANTIQUITIES PERMIT NUMBER: 6014

NEWLY RECORDED SITES: 41PR147 and 41PR148

PREVIOUSLY RECORDED SITES: None

COMMENTS: B&A recommends that the proposed construction should be allowed to proceed as planned at 41PR147 without additional investigations, as the proposed construction would not affect any archeological historic property pursuant to 36 CFR 800.4(d)(1). However, it is B&A's opinion that at the current level of investigations, the eligibility of site 41PR148 for inclusion to the NRHP or for SAL

designation is unknown. To determine eligibility would require consideration of the resource in terms of issues such as the extent of terraced fields and soil erosion control infrastructure originally constructed by the Civilian Conservation Corps (CCC) in Parker County, the state of preservation of remaining terraced fields and soil erosion control infrastructure constructed by the CCC in Parker County, and 3) the contribution of said CCC infrastructure to the agricultural and economic development of the county. Although the ditch associated with the structures has filled in over time (i.e., it captures soil as designed), the terraced field and erosion control structures work as a system and remain functional. Given these data, B&A recommends that site 41PR148 should be avoided by the planned construction. To facilitate avoidance, the structures should be temporarily fenced during construction. If avoidance is not possible, then B&A recommends extensive archival research and a comparative analysis of terraced field systems and soil erosion control structures constructed by the CCC that remain in Parker County to develop a context with which to assess the resource's NRHP eligibility.

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INTRODUCTION

During August 10–11, 2011, Blanton & Associates, Inc. (B&A) conducted an intensive non-collection archeological survey at the request of Aguirre & Fields, LP and on behalf of the Texas Department of Transportation's (TxDOT) Ft. Worth District, of Old Airport Road at Burgess Creek in Parker County Texas (CSJ: 0902-38-062) (**Figures 1 and 2**). Investigations occurred prior to proposed roadway improvements including the relocation of part of Old Airport Road southwest of its existing location and a new bridge at Burgess Creek (**Figure 3**).

PROJECT DESCRIPTION

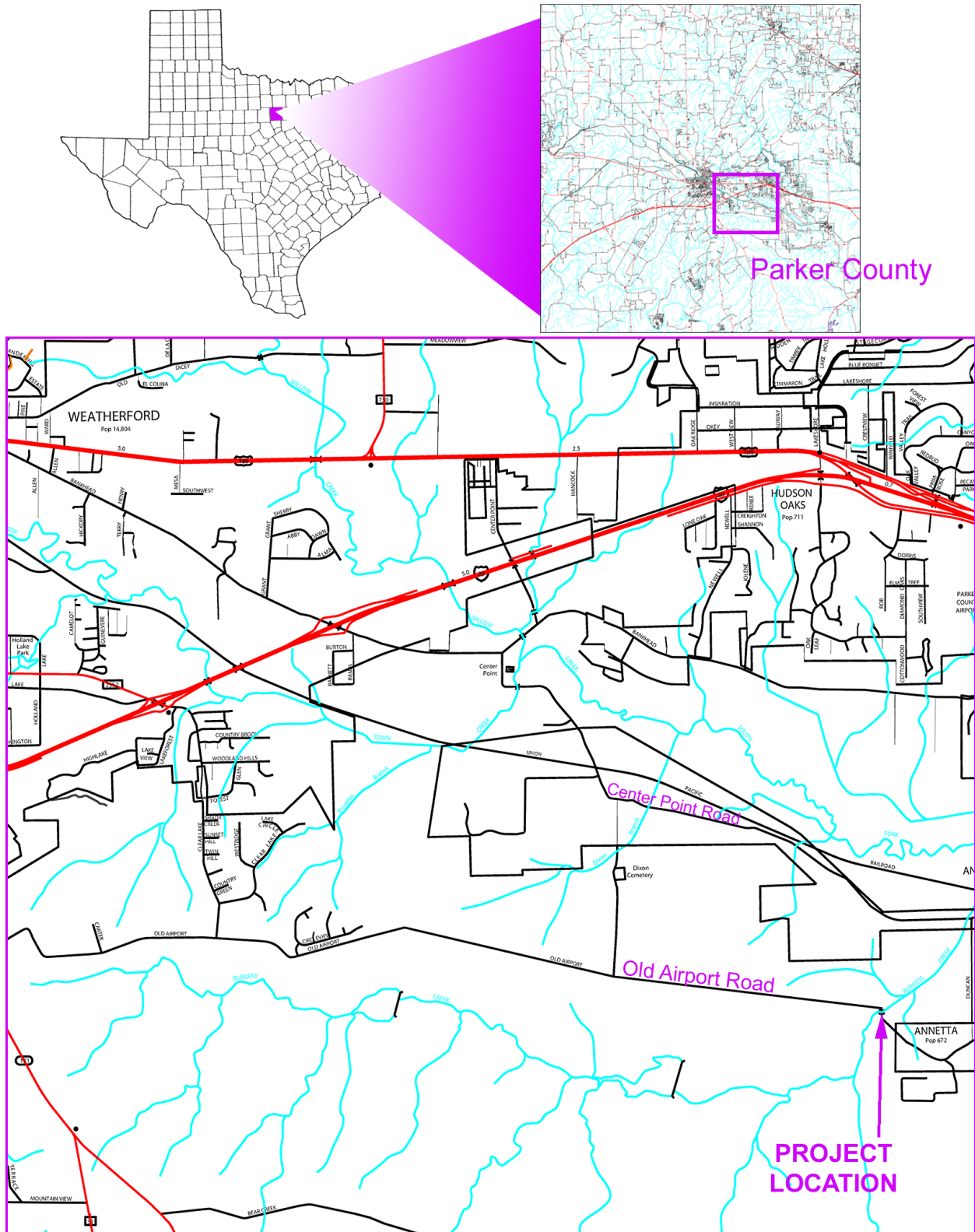
The proposed improvements would involve the relocation of approximately 1,600 linear feet of Old Airport Road southwest of its current location. The planned roadway re-construction would by-pass the existing crossing of Old Airport Road at Burgess Creek and includes a new bridge structure several hundred feet upstream from the existing bridge. The proposed project would occur within existing and proposed Old Airport Road right-of-way (ROW) (see **Figure 3**).

The existing Old Airport Road ROW is variable, ranging from 28 to 60 feet wide (**Figure 4**). The existing two-lane roadway varies from 18 to 24 feet wide. The width of the lanes varies from 9 to 12 feet wide. There is an open-ditch drainage system and no shoulders. The proposed ROW would vary from 100 to 120 feet wide and contain a two-lane roadway with 10 to 12 foot wide lanes (see **Figure 4**). Shoulders would be eight feet (or less) wide and there would be a 30-foot wide clear space on either side of the roadway. The proposed bridge would be 330 feet long and 42 feet wide (**Figure 5**).

The overall Area of Potential Effect (APE) for the proposed construction is approximately 1,600 feet long, a maximum of 120 feet wide, and encompasses approximately 4.969 acres (3.795 acres of proposed ROW and 1.174 acres of existing ROW). Vertical impacts would extend a maximum depth of approximately 43 feet below the ground surface for bridge supports and two to three feet for roadway construction. Available construction plans indicate that there would be no temporary or permanent easements required.

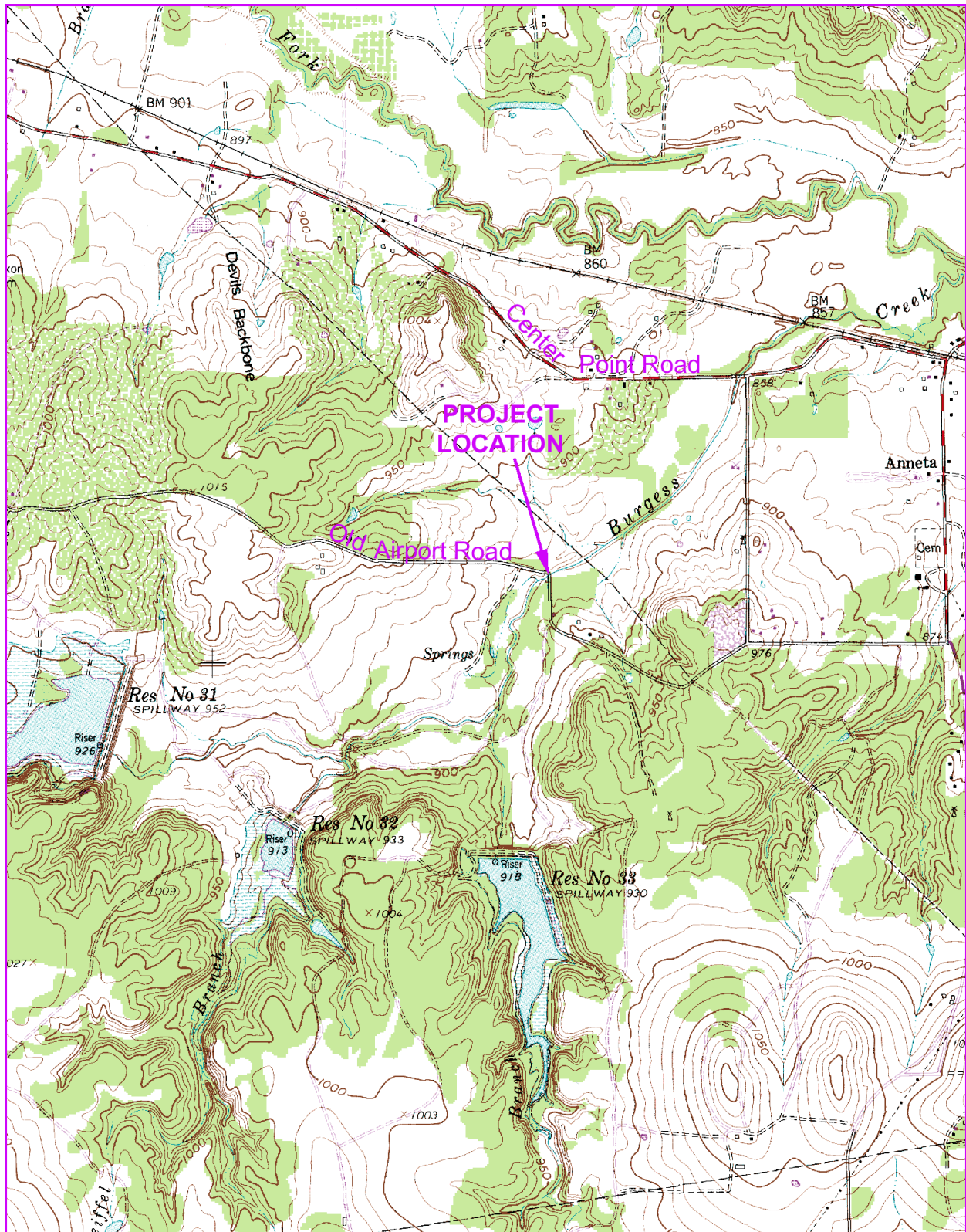
Because the proposed construction would occur on property administered by TxDOT, the project is subject to the provisions of the Antiquities Code of Texas, now subsumed in Title 13, Part II of the Texas Administrative Code. This legislation requires that any political subdivision of the State of Texas must identify potential State Archeological Landmarks (SALs) through survey of public lands prior to actions that could potentially damage those SALs. The Texas Historical Commission (THC) Division of Archeology administers the code's provisions. Protection of archeological sites under state law is tied to eligibility for formal SAL designation pursuant to 13 TAC 26.8. Archeological surveys of public lands require a Texas Antiquities Permit issued by the THC. Survey investigations were conducted under Texas Antiquities Permit No. 6014 issued to Principal Investigator Brandon S. Young.

Additionally, because the project would utilize funds from the Federal Highway Administration (FHWA), the proposed construction is also subject to the provisions of Section 106 of the National Historic Preservation Act. Consideration of archeological resources under federal law is tied to eligibility for the



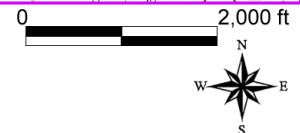
<<http://www.tnris.state.tx.us/digital.htm>>
 Accessed July 2005

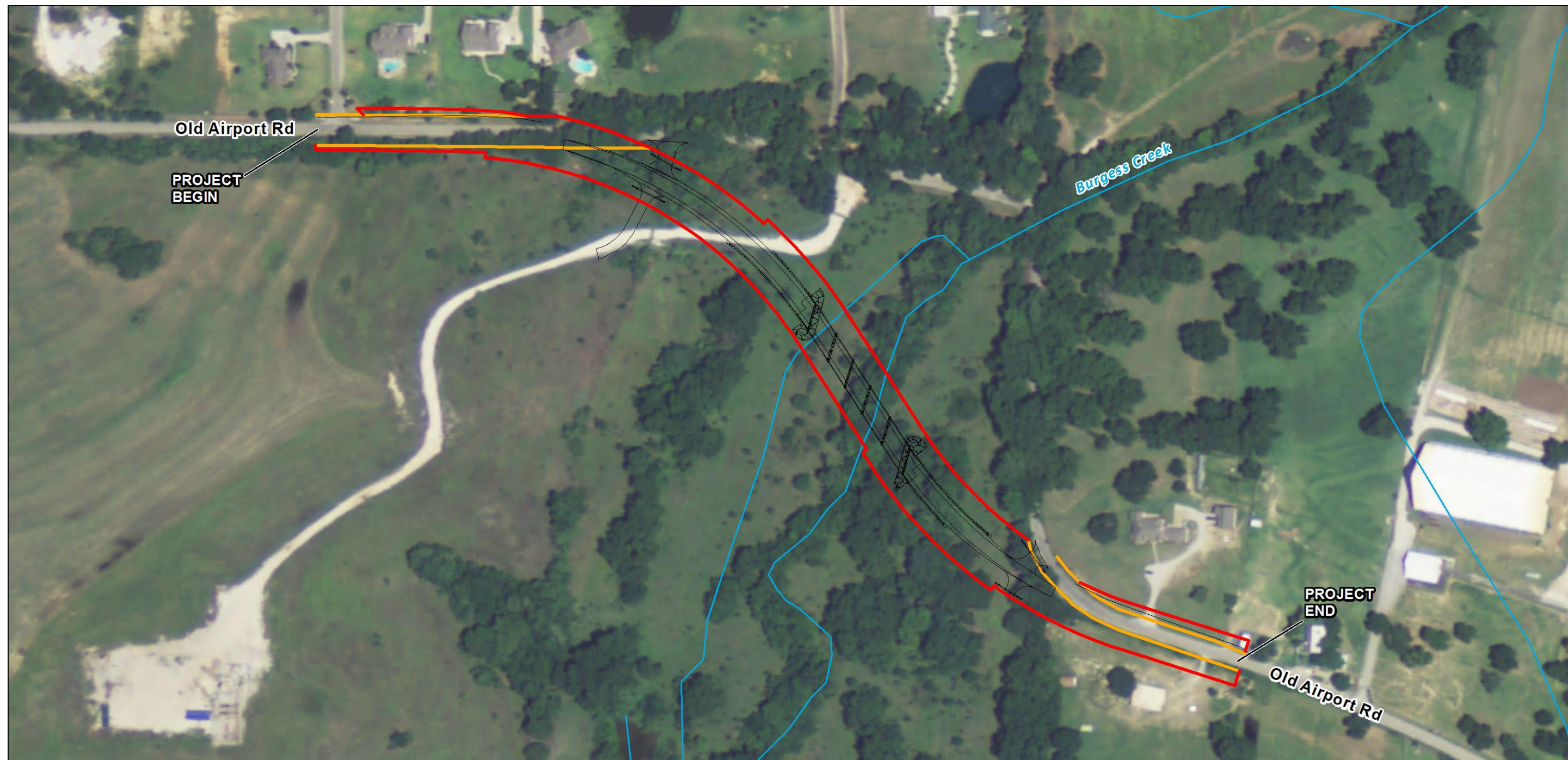
Figure 1
 Project Location on County Map Base
 Old Airport Road over Burgess Creek
 CSJ: 0902-38-062



Base Map: USGS 7.5' Topographic
Quadrangle, Annetta, Texas

Figure 2
Project Location on USGS Map Base
Old Airport Road over Burgess Creek
CSJ: 0902-38-062





- Existing Right-of-way
- Proposed Right-of-way
- Proposed Improvements
- ~ Stream

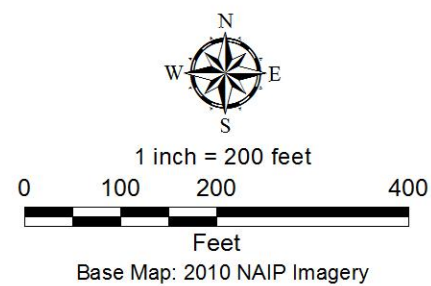
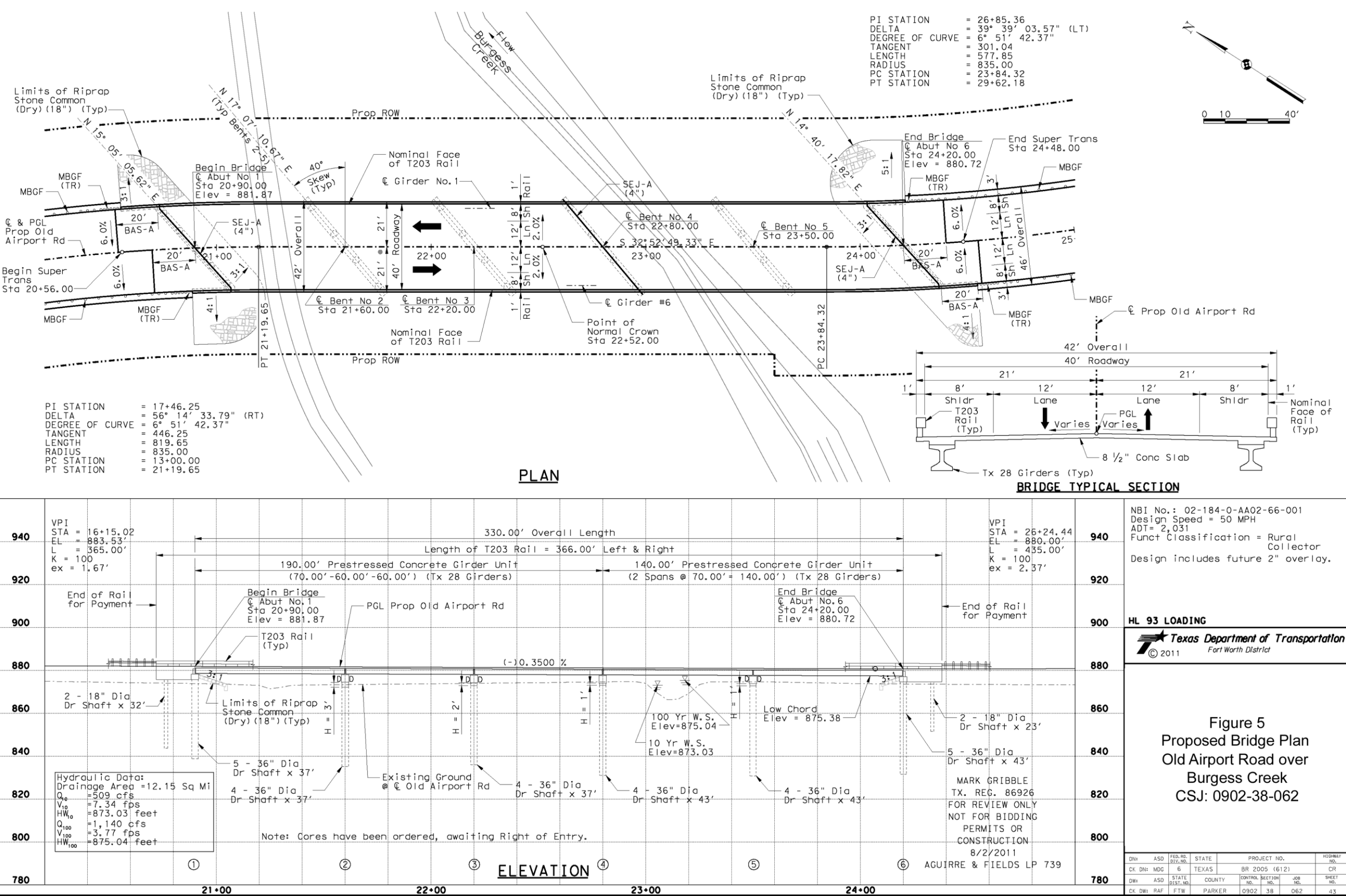


Figure 3
Project Location on Aerial Imagery
Old Airport Rd at Burgess Creek
Parker County, Texas
CSJ: 0902-38-062



National Register of Historic Places (NRHP) that depends on criteria defined by National Park Service (NPS) rules 36 CFR 60.

The intent of the survey was to identify and describe all archeological resources discovered within the APE, evaluate their eligibility for inclusion to the NRHP or for formal SAL designation and, should significant cultural resources be discovered, make recommendations for future resource management options such as avoidance, preservation, or further investigations. All work was conducted in accordance with the terms and conditions of the First Amended Programmatic Agreement among the FHWA, TxDOT, the Texas State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP), and TxDOT regarding the Implementation of Transportation Undertakings (PA-TU), as well as the Memorandum of Understanding (MOU) between TxDOT and THC.

ENVIRONMENTAL SETTING

The project area is located within the Cross Timbers and Prairies Area and is mapped as Post Oak Wood, Forest, and Grasslands Mosaics (30b) in the *Vegetation Types of Texas* by McMahan et al. (1984). The terrain is bottomland woods converted to pasture(**Figure 6**), with sandstone and limestone escarpments and bedrock. Approximately 525 meters southwest of the existing Old Airport Road bridge at Burgess Creek and 350 meters northeast of the southern end of the APE are a series of springs. Fresh water from the springs and Burgess Creek would have been an attraction to prehistoric groups and historic-era (late nineteenth centuries and early twentieth century) settlers.



Figure 6. Pasture terrain typical of the region in and adjacent to the APE

GEOLOGY

The geology of the area consists of Lower Cretaceous Paluxy Sand and recent (Holocene) Alluvium. The majority of the proposed ROW traverses Holocene Alluvium (e.g., clay, silt, and sand) in the flood plain and terraces of Burgess Creek (Barnes 1987). Holocene Alluvium has consistently been shown to have a good potential to contain buried archeological deposits. In the northern and southern ends of the APE is Paluxy Sand (sand and clay) (Barnes 1987). Given the Lower Cretaceous age of Paluxy Sand, which predates known human occupation of Texas, there is little potential for it to contain buried *intact* archeological deposits. Archeological material could, however, be discovered on the surface of the formation or shallowly buried just beneath its surface via prehistoric activities (e.g., excavation of a shallow pit or basin for a hearth or other thermal feature).

SOILS

Soils in the APE include Frio clay loam, occasionally flooded, Windhorst fine sandy loam, 1 to 5 percent slopes (eroded), and Venus clay loam, 1 to 3 percent slopes (Greenwade et al. 1977). Frio clay loam, occasionally flooded, is a loamy soil the developed in calcareous loamy to clayey alluvial sediments found on bottomlands (Greenwade et al. 1977:22–23). Given the alluvial origins of this soil, which covers the majority of the APE, it has a potential to contain buried archeological material.

In the northern end of the planned construction area is an area of Windhorst fine sandy loam, 1 to 5 percent slopes (eroded). The sandy and loamy Windhorst soils are found on uplands and developed in place from weathered sandstone and clayey and loamy sediments (Greenwade et al. 1977:39–40). Given that this upland soil developed in place, there is little potential for it to contain *intact* buried archeological material. There is, however, a potential for surface sites with displaced components buried in the A horizon from 0 to approximately 30 centimeters below ground surface. However, the buried component would most likely be horizontally and vertically displaced within the fine sandy loam due to percolation and historic land use (e.g., pasture, plowing, terracing, and vegetation clearing) and the recent construction of a residential subdivision north of Old Airport Road.

The southern end of the APE contains a small are of Venus clay loam, 1 to 3 percent slopes. This loamy upland soil developed in place from unconsolidated calcareous loamy sediments (Greenwade et al. 1977:37–38). Because this upland soil developed in place, it has little potential to contain buried archeological material.

FLORA

The APE falls within Post Oak Wood, Forest, and Grasslands Mosaics dominated by blackjack oak (*Quercus marilandica*), eastern red cedar (*Juniperus virginiana*), honey mesquite (*Prosopis glandulosa*), black hickory (*Carya texana*), live oak (*Quercus virginiana*), sandjack oak (*Q. incana*), sugar hackberry (*Celtis laevigata*), cedar elm (*Ulmus crassifolia*), yaupon (*Ilex vomitoria*), poison oak (*Toxicodendron radicans*), American beautyberry (*Callicarpa americana*), hawthorn (*Crataegus* spp.), supplejack (*Berchemia scandens*), trumpet creeper (*Campsis radicans*), dewberry (*Rubus* spp.), coral-berry (*Symphoricarpos orbiculatus*), little bluestem (*Schizachyrium scoparium*), silver bluestem (*Bothrichloa saccharoides*), sand lovegrass (*Eragrostis trichodes*), beaked panicum (*Panicum anceps*), three-awn (*Aristida* spp.), spranglegrass (*Chasmanthium sessiliflorum*), and tickclover (*Desmodium* spp.).

HISTORIC BACKGROUND

The majority of the historical period in Parker County is characterized by agricultural pursuits and the raising of beef cattle, growing grain, and cultivating cotton. As a result, most of the people who came and lived in the area were farmers and cattle ranchers. Their migration to Parker County began in the mid-nineteenth century when an outbreak of malaria prompted many residents of Tarrant, Denton, and Collin Counties to escape the epidemic. Enough residents lived in the area that local leader, Isaac Parker, led settlers to petition the state legislature for the creation of a new county in 1855, with Weatherford as its county seat (Echeverria 2011).

Weatherford was incorporated in 1858 and a post office opened in 1859. The new county seat was midway between Fort Worth and Fort Belknap. Weatherford functioned not only as the county seat but also as a safe haven for Parker County residents, who fled to the city during raids by the Comanche and Kiowa until the early 1870s. While conflicts between the settlers and local Native American groups occurred throughout the county, people still came to the area in large numbers, and by the dawn of the U.S. Civil War in the early 1860s, the county had over 4,000 residents and 397 farms and ranches of three acres or larger (Echeverria 2011). During the war, most of the men left their Parker County farms and many of them fell into disrepair. The number of improved acres of land was cut in half between 1860 and 1870, and several of these agricultural properties were abandoned, and by 1870 only 148 farms and ranches were reported in the county (Echeverria 2011).

In 1876, A.B. Fraser settled less than a half mile east of the project site. Fraser, a Civil War veteran who immigrated to Honduras after the war, returned to the area with his wife and daughter, Annetta (Official Texas Historical Marker, 1998). Fraser set up a station for men working ox-trains and who were moving goods to Dallas. He also established a post office at that time as well, and he called his settlement for his daughter Annetta, who's name meant "little Annie" After the Texas and Pacific Railway was constructed adjacent to his settlement a few years later in 1880, Fraser built a general store and a small community began to develop around the store (Minor 2011a; Town of Annetta 2011).

By 1880, the Texas and Pacific Railway reached Weatherford and was followed seven years later by the Santa Fe line. By 1891 a local line, the Weatherford, Mineral Wells and Northwestern Railway, began operations and, in conjunction with the other two rail lines, the network of rail established the county seat as a shipping point for Parker County farmers and ranchers (Minor 2011b). Parker County residents thrived from raising cattle and/or farming cotton, corn, or grains. By the close of the nineteenth century, more than 25,000 residents lived in the county and the number of ranches and farms increased to 3,529, more than 23 times the number of agricultural properties that existing 30 years before. With cotton as the county's (and the state's) most important cash crop, large volumes of cotton were harvested, with approximately 61,000 bales produced in 1900 (Echeverria, 2011).

During the first years of the twentieth century, the economy remained strong with cotton and cattle production being most important in the county. Some farmers diversified and began growing fruit as well, with watermelon being a primary fruit crop. During World War I, demand for cotton remained steady but after the war, cotton as well as cattle markets began to decline for several reasons. Cotton production was

greatly impacted by three factors: a drought that severely impacted crop production, over-production among Texas farmers during plentiful years led to decreased demand and price, and tenant farmers and sharecroppers leaving farming for urban centers after the war (Britton 2011). Further decreases in both cotton and cattle markets occurred when deflation and foreign competition crippled them. To make matters worse in the cattle industry, desperate farmers in the Great Plain states converted their farms to ranches in areas such as Wyoming, Colorado, and Nebraska; these ranchers flooded the market with additional cattle, causing prices to plummet.

While the cotton and cattle industry was suffering in Palo Pinto County and in much of the state during the 1910s and 1920s, county governments throughout Texas were constructing new roads and bridges to provide road systems for the increasing number of vehicles. County governments were investing in building and improving road systems throughout the state to provide all-weather roads that provided access to and from markets. Truck crops, including watermelons, could be more easily transported from local farms to towns and cities. It is possible that Old Airport Road was either constructed or improved in the early 1920s as part of the county's initiatives because the extant Warren pony truss bridge that spans Burgess Creek was built in 1923.

After the stock market crashed in 1929, Parker County, like much of Texas, was hard hit during the Great Depression. Government intervention helped the agricultural industry in Palo Pinto County through ranch management measures and soil conservation. Seeing how hurt the American rancher was by the economic crisis of the Great Depression, the federal government took unprecedented steps to help ranchers in 1934 by initiating a program to reduce the inventory of cattle in the U.S. They did so by buying cattle from ranchers and killing them. By reducing the number of cattle in the U.S., they hoped to equalize supply and demand, which would rebound the price of beef in the U.S. In reality, most ranchers sold their smallest, weakest, and sickest cows to the government and used the money to improve their herds by purchasing new, "heavier" breeds (Richardson and Hinton 2011).

Additionally, the federal government's Civilian Conservation Corps (CCC) program helped local farmers during the Depression. The CCC was a work-relief program that Franklin D. Roosevelt began immediately after his inauguration that was designed to preserve natural resources and develop parklands. The program required that the workers enroll for a 6-month period and provided a pay check of \$30 per month for laborers and up to \$45 a month for local experienced men, such as skilled craftsmen, professional architects, landscape architects, and engineers (Steely and Monticone 1986). Roosevelt created two arms of the CCC, one that was focused on forestry and soil conservation under the Department of Agriculture (USDA) and one that built state parks under the Department of the Interior (DOI). The men were fed, clothed, and housed in 200-men companies, which were based at camps throughout the country (Steely and Monticone 1986). The Texas Relief Commission and later the Department of Public Welfare oversaw the CCC program at the state level, and within the Department of Public Welfare were the Soil and Water Conservation Commission and the State Park Board (Hendrickson 1974: 39).

While the CCC lasted only during the 1930s, a more permanent soil conservation program was established by the federal government in the late 1930s – the Soil Conservation Service (SCS), an arm of

the USDA. Due to the amount of rapid soil loss from cotton and corn production, Texas created its own permanent conservation measures in 1939. At that time, the Texas Soil Conservation Law was passed that established local districts to implement soil conservation programs. By 1941, Texas had created 65 soil conservation districts to provide services and education for local farmers. Together with technical advice from the SCS, local districts created reservoirs to help control soil erosion. Sometime between the end of World War II in 1945 and the late 1950s, a series of three reservoirs (Reservoirs 31, 32, and 33) were created on Burgess Creek directly upstream from the project site. Presumably, these were built for erosion control and were built by the local district with SCS help (Etienne-Gray 2011).

Although Annetta had less than 50 residents in the late 1970s, the area around the project rapidly developed in the 1980s as a bedroom community for Fort Worth. New subdivisions and homes began springing up around the Annetta community, and the northern and southern sections of the newly developed areas were established as their own towns – Annetta North and Annetta South. In 1990, Annetta North had 265 residents, Annetta South had 413 residents, and Annetta (central) had 678 residents (Minor 2011a).

PREVIOUS INVESTIGATIONS

A review of records available on the THC's online Texas Archeological Sites Atlas (TASA) indicated that there are no previously recorded archeological resources within the proposed project area. There are, however, two previously recorded archeological sites (41PR96 and 41PR97) adjacent to the north end of the project area on the north side of Old Airport Road. Site 41PR96 (Burgess Creek Site) was recorded in 2001 and described as a prehistoric camp on private property disturbed by previous land clearing and the construction of a housing development. Documented artifacts included dart points, chipped-stone debitage, and ground stone artifacts exposed on the ground surface (TASA 2011). Site 41PR97 was recorded in 2001 and described as consisting of a three-meter diameter historic hand-dug and stone lined water well. The site also contained a surface scatter of historic glass shards and ceramic sherds. The well and artifact scatter were thought to be associated with a former house site (TASA 2011).

Non-archeological field investigations of the APE by other B&A personnel indicated that west of the existing Old Airport Road alignment within the proposed ROW is an existing historic stone lined water well approximately 150 feet north of a very large pecan tree. The presence of the well and large tree suggests that the proposed ROW contains part of a former farmstead/homestead similar to that associated with 41PR97 north of Old Airport Road (and outside the APE). Further, at the northern terminus of the proposed project area are three stone structures identified as probable soil erosion control structures approximately 350 feet west-northwest of the stone lined well.

Although examination of the Texas State Highway Department's 1936 (partially revised to 1940) *General Highway Map, Parker County, Texas* indicated that there were no structures within the APE, (though it depicts one structure west of the creek and just beyond the APE), given the presence of the well and stone engineering structures, the proposed ROW contained two historic archeological resources that, in addition to field documentation, required oral histories and/or archival research to document and assess the historic-age archeological resources.

METHODOLOGY

Blanton & Associates, Inc. conducted an intensive survey of the project areas with surface and subsurface investigations as necessary based on field conditions, in accordance with an appropriate research design (developed pursuant to 13 TAC 26.21(d)). Investigations complied with appropriate archeological survey methods as defined in the Secretary of the Interior's Standards and Guidelines (NPS 1983), the Guidelines of the Council of Texas Archeologists (1987), survey standards developed by the THC in conjunction with the Council of Texas Archeologists (THC n.d.), and pursuant to 13 TAC 26.20. All field investigations were thoroughly photo-documented with digital cameras.

Surface investigations consisted of a systematic 100 percent pedestrian inspection of the ground surface within the APE. Additionally, parts of the APE where right-of-entry (ROE) was not obtained were visual examined from adjacent locations in the APE where there was ROE to determine the presence of standing structures and/or visible surface scatters of artifacts. Where possible, cutbank profiles along Burgess Creek were cleaned and inspected for buried archeological deposits.

Survey standards established by THC (n.d.) and CTA (1987) for linear project areas require that surface surveys be augmented by systematic shovel testing (16 shovel tests per mile or one shovel test every 330 feet) in locations where surface visibility falls below 30 percent (deviations from these standards would be justified in the report of investigations). However, given the potential for Holocene alluvium and the known presence of alluvial soils within the APE, subsurface investigations emphasized backhoe trenching. Backhoe trenches were approximately five meters (16.4 feet) long, 1.5 meters (4.9 feet) wide, and at least 1.5 meters (4.9 feet) deep. Following excavations, archeologists cleaned and examined trench walls to locate any *in situ* artifacts, features, and/or soil anomalies in the trench profiles. Stratigraphic zones in each trench were recorded and photographed. All backhoe trench locations were plotted with GPS.

RESULTS OF INVESTIGATIONS

As **Figure 7** indicates, the proposed ROW for the planned improvements to Old Airport Road crosses six parcels of private property. Right-of-entry (ROE) was not, however, obtained to five of the parcels and investigations there were not possible (**Table 1**).

Table 1. Properties where right-of-entry was not granted

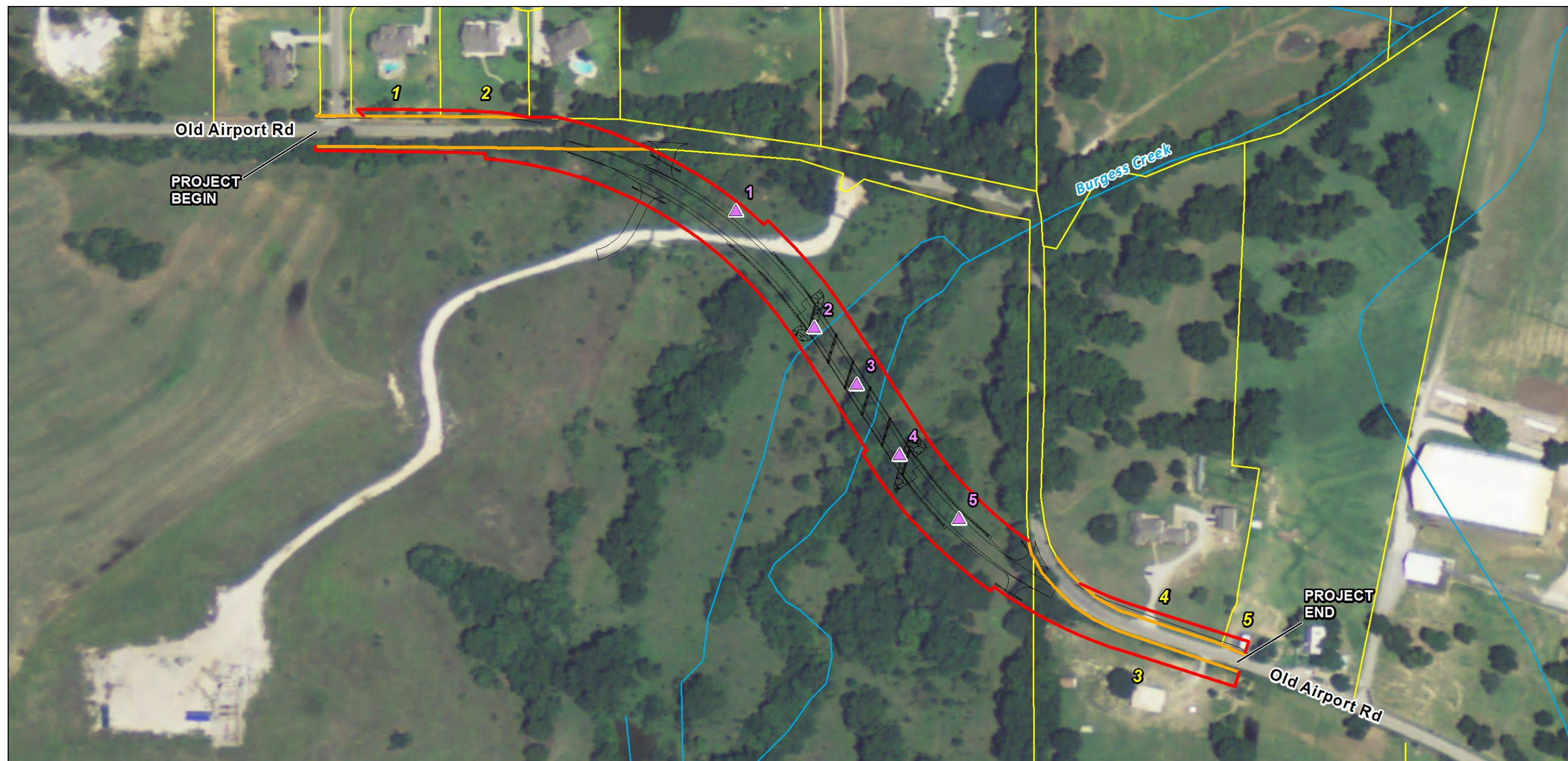
Property No.*	Owner	Proposed ROW Acreage	Parker County Deed Records
1	W.C. Hix	0.04	Vol. 2221, page 55
2	J. and R. Roos	0.03	Vol. 2298, page 1180
3	C. Petro	0.38	Vol. 2345, page 1074
4	K. and P. Wessel	0.12	Vol. 1716, page 666
5	S. and K. Malley	0.03	Vol. 2520, page 1429

*Arbitrary number used by Blanton & Associates, Inc. for organizational purposes

Intensive survey investigations of Old Airport Road at Burgess Creek revealed extensive previous surface and subsurface impacts to significant parts of the APE. The terracing of the field in and adjacent to the north part of the APE displaced and re-deposited extensive amounts of soil, thereby disturbing any archeological deposit(s) that may have been present on, and/or buried within, the relatively thin (0 to 30 centimeters or less below ground surface) sandy upland soil (see **Figure 7**).

North of Old Airport Road in the northern terminus of the APE adjacent to where proposed ROW ties into existing the ROW, the recent construction of a residential subdivision extensively disturbed the proposed ROW in that location, while the existing old Airport Road ROW contains surface and subsurface utilities, and has been vertically impacted by roadway construction. The south end of the APE where the proposed ROW ties back into the existing ROW contained gravel and clay road base exposed at the ground surface. Additional impacts within the proposed construction areas included fences paralleling Old Airport Road.

Subsurface investigations within the APE involved examination of the Burgess Creek cutbank (**Figure 8**) within the APE and the excavation of five backhoe trenches (BHTs 1–5) (**Appendix A**). Excavations west of Burgess Creek included BHTs 1–3, while BHTs 4 and 5 were located east of the creek. On the west side of the creek, BHTs 1–3 exhibited three to five soil zones consisting of sandy loam or clay loam overlying clay loam, clay, or sand subsoil (see **Figure 7**). As **Appendix A** indicates, BHTs 1 and 3 contained three zones while BHT 2 exhibited five. Zone III in BHT 1 was an anomalous massive white sand zone extending from 52 to 130 centimeters + below ground surface. The excavation of BHTs 1–3 discovered no buried archeological material (see **Appendix A**). BHTs 4 and 5 were excavated east of Burgess Creek and both exhibited three soil zones between 0 and a maximum depth of 217 centimeters below ground surface (see **Figure 7**). BHT 4 contained clay loam over clay subsoil and BHT 5 contained three clay strata with common to abundant calcium carbonate nodules and flecks, as well as pea gravels in Zones I and III. Excavations discovered no archeological resources.



- ▲ Backhoe Trench (#)
- # Property ID
- Proposed Right-of-way
- Existing Right-of-way
- Proposed Improvements
- Parcel Boundary
- Stream

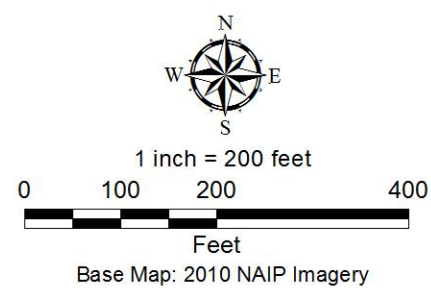


Figure 7
Project Area with Subsurface Tests
where Right-of-entry etc.
Old Airport Rd at Burgess Creek
Parker County, Texas
CSJ: 0902-38-062



Figure 8. Representative view of the cut bank along Burgess Creek

Although subsurface investigations discovered no archeological resources, the survey discovered two historic archeological resources, 41PR147 and 41PR148.

Site 41PR147

Site 41PR147 consists of a historic hand dug water well in the northern part of the APE just west of an existing improved gravel road that provides access to a gas well and to the parcel of private property itself. The site measures approximately five meters north-south by five meters east-west (**Figure 9**). The well is located on the second terrace west of Burgess Creek, which slopes from northwest to southeast toward the northeast to southwest flowing creek.

The well extends approximately three feet above the ground surface, has an outer diameter of approximately 3.5 feet and an opening approximately two feet wide (**Figure 10**). It is constructed of local partially dressed sandstone and is dry-laid below ground. Individual stones tend to be tabular and average approximately 10–15 centimeters by 3–4 centimeters in size. The upper three feet of the well above ground consists of 5 to 6 courses of stones cemented in place. It is approximately 15 feet deep and was dry at the time of recording. Several fragments of burned milled lumber are at the bottom of the well. The well does not exhibit any unusual construction technique or design nor is it associated with any standing house, outbuildings, or foundations. The excavation of BHT 1 on site discovered no buried artifacts or cultural features, only sandy loam overlying clay loam and clay subsoil (see **Appendix A**).

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CONFIDENTIAL SITE LOCATIONS**



Figure 10. View of the hand-dug well on 41PR147

The 1936 *General Highway Map, Parker County, Texas* (updated 1940) indicates that there was a probable domestic structure several hundred feet west of Burgess Creek and the well. Presumably, that structure and the well were associated but the structure has long since been demolished or removed. A review of available historic (i.e., 1959 and 1979) United States Geological Service (USGS) 7.5-minute topographic quadrangle maps showed no structure(s) where the 1940 county map does. Thus, sometime between 1940 and 1959, the structure was demolished or moved to a currently unknown location. Discussions with the current landowner Ms. Muir (personal communication 2011) did not provide any conclusive information regarding a previous farmstead or house site.

Given the lack of unusual construction technique or design, no associated surface or subsurface artifact scatter, and no associated features or additional structures, it is B&A's opinion that 41PR147 cannot provide any new or important information.

Site 41PR148

Site 41PR148 consists of three stone and concrete soil erosion control structures arranged in an east-west alignment, an associated ditch, and the margins of a broad terraced field approximately 400 feet west of 41PR147. The site measures approximately 15 feet north-south by 250 feet east-west and slopes from west to east (**Figure 11**) on the lower slopes of a hill that was previously terraced (see **Figure 6**).

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However, the terraced field extends hundreds of feet south and west of this site beyond the APE and could not, therefore, be investigated. Subsurface investigations were not conducted on site as the entire area around the structures was significantly impacted both horizontally and vertically by the terracing of the open field and the excavation of the ditch in which the structures sit; red sandy clay subsoil is exposed at the surface.

Each structure is local sandstone and cement and is approximately 15 feet wide, 3.5 feet tall, and 2 feet thick. From west to east (down slope), Structure 1 and 2 are approximately 75 feet apart, while Structure 3 is roughly 125 feet east of Structure 2 (**Figure 12** and see **Figure 6**). The structures rest in an approximately 15-foot wide and three-foot deep earthen ditch designed to channel run-off from the adjacent terraced hill away from Old Airport Road. Run-off from the terraced hillside flows into the ditch and then over the check dams, thereby slowing the velocity of the flow of run-off to prevent soil loss, gullying and other erosion. The ditch associated with the structures has filled in over time (i.e., it captures soil as designed), the terraced field and erosion control structures work as a system that remains functional. Discussions with the current landowner Ms. Muir (personal communication 2011) indicated that she was unaware of the presence of the stone structures on the property.



Figure 12. Representative view of the stone and concrete soil erosion control structures

The 1936 *General Highway Map, Parker County, Texas* (updated 1940) does not indicate the presence of the stone structures, though it shows that there was a probable domestic structure several hundred feet west of Burgess Creek in the general vicinity of the structures. While this house is shown on the 1940 maps, it is difficult to ascertain if it was associated with the terraced fields and 41PR147 and 41PR148

(THD 1940). Also by the late 1950s, no residence is shown as associated with the terraced field and site 41PR148 on the 1959 United States Geological Service (USGS) topographic map; only outbuildings are illustrated atop the hill above the terraced field northwest of the APE (USGS 1959). These same outbuildings are shown on the 1979 USGS topographic map, and no residences are shown at this location.

An August 18, 2011 email exchange between Frank Sprague, a retired Soil Conservation Service employee, and John Arnn, the TxDOT archeologist for Fort Worth District, revealed that after review of photographs of the structures, Mr. Sprague believed that the stone structures were likely the “remains of old terrace systems put in by the CCC...” (Sprague 2011). He noted that these types of structures were placed at terrace outlets to prevent erosion of waterways which were too steep for vegetation to control erosion (Sprague 2011). He noted that these types of structures were placed at terrace outlets to prevent erosion of waterways which were too steep for vegetation to control erosion (Sprague 2011).

Based on the above data, it is reasonable to presume that the CCC likely constructed the stone structures on 41PR148, as well as the associated terraced field. As previously discussed, the CCC is best known because of their creation of state parks and construction of cut-stone and wood buildings, the forestry and soil conservation division under the USDA was much larger and employed more CCC workers than the DOI branch. Kenneth E. Hendrickson, Jr.’s article “Replenishing the Soil and the Soul of Texas” states, “The majority of the [CCC] projects were devoted to soil conservation and erosion control, followed by park and recreational development...” (Hendrickson 1974: 42). In 1935 for example, the DOI division had 27 camps, which included 5,400 men, while the USDA division had 70 camps, with approximately 14,000 men. A 1938 *Fort Worth Star-Telegram* newspaper article notes that the CCC in Texas had treated over 1.2 million acres of bank sloping, erected 1,869 permanent and 2,604 temporary check dams, and constructed 712 miles of terraces on farms (Timmons 1938). Hendrickson even noted in his article that the most important result of the CCC in Texas was the soil conservation program, which worked on 5,000 farms (Hendrickson 1974: 47). Since the CCC records regarding the soil conservation work are maintained at the National Archives in Washington, D.C., it is difficult to definitively ascertain if 41PR148 and the terraced field adjacent to them were built by the CCC; however, it seems likely.

Given the above data, it is B&A’s opinion that at the current level of investigations, the eligibility of site 41PR148 for inclusion to the NRHP or for SAL designation is unknown. To determine eligibility would require extensive archival research and, quite possibly, a comparative study of similar existing CCC erosion control structures in Parker County.

SUMMARY AND RECOMMENDATIONS

The systematic excavation of five BHTs across the 1,386-foot long APE revealed no buried archeological resources. In contrast, surface examination of the APE where ROE was obtained discovered historic archeological sites 41PR147 and 41PR148.

The hand dug well comprising 41PR147 does not exhibit any unusual construction techniques or design, nor are there any associated surface or subsurface artifact scatters, or additional cultural features associated with the well. Based on a review of the TSHD's 1940 *General Highway Map, Parker County*, there was a structure several hundred feet west of the well; there is, however, no conclusive evidence at this time that indicates they were associated. Research discovered no maps depicting a structure prior to 1940 nor do available maps produced after 1940 (i.e., 1959) depict any structures in the vicinity of 41PR148. Thus, sometime between 1940 and the late 1950s, the structure was presumably demolished or moved to an unknown location. Given these data, it is B&A's opinion that 41PR147 cannot provide any new or important information and is not, therefore, recommended as eligible for inclusion to the NRHP or worthy of SAL designation. As such, B&A recommends that the proposed construction at 41PR147 should be allowed to proceed as planned without additional investigations because the construction there would not affect any archeological historic property (36 CFR 800.4(d)) or SAL.

Site 41PR148 consists of three soil erosion control structures, an associated ditch, and the margins of a broad terraced field likely constructed by the CCC in the mid to late 1930s. The structures rest in the approximately 15-foot wide and three-foot deep earthen ditch designed to channel run-off from the adjacent terraced hill away from Old Airport Road. Run-off from the terraced hillside flows into the ditch and then over the structures, thereby slowing the velocity of the flow of run-off to prevent soil loss, gullyng and other erosion. The ditch associated with the structures has filled in considerably over time (i.e., it captures soil as designed) indicating that the terraced field and erosion control structures work as a system that remains functional. It remains unknown if the CCC was responsible for the terraced field and erosion control structures.

Based on the above data, it is B&A's opinion that at the current level of investigations, the eligibility of 41PR148 for inclusion to the NRHP or for SAL designation is unknown; to determine eligibility would require determining if the CCC was in fact responsible for the terracing and erosion control structures and, if so, consideration of the resource in terms of the extent of terraced fields and soil erosion control infrastructure originally constructed by the CCC in Parker County, the state of preservation of remaining CCC terraced fields and soil erosion control infrastructure in Parker County, and the contribution of said infrastructure to the agricultural and economic development of the county. Given these data, B&A recommends that 41PR148 should be avoided. If avoidance is not possible, than an intensive historic resources survey (including accessing resources available at the National Archives) of the parcel, as well as a comparative analysis of existing CCC soil erosion control infrastructure in Parker County, would be necessary to determine the site's NRHP and SAL eligibility.

As **Table 2** indicates, 0.6 acre of proposed ROW could not be surveyed because ROE was not obtained to five parcels of private property. Based on the results of the survey where ROE was granted, geologic and

soil conditions in the APE, previous impacts from historic and modern land use, and the small size of proposed ROW on these properties, B&A recommends that intensive survey of Properties 1, 2, 4, and 5 is not necessary. However, given the size (0.38 acre) of the proposed ROW on Property 4, B&A recommends that it should be subjected to an intensive survey with judgmental subsurface testing when ROW is obtained to ensure that no archeological historic properties (36 CFR 800.16[1]) or SALs would be impacted by the proposed project in that location.

Table 2. Survey recommendations for properties where right-of-entry was not granted

Property No.*	Owner	Proposed ROW Acreage	Parker County Deed Record	Recommendations
1	W.C. Hix	0.04	Vol. 2221, page 55	No further work recommended due to previous impacts from recent subdivision construction and construction of Old Airport Road
2	J. and R. Roos	0.03	Vol. 2298, page 1180	No further work recommended due to previous impacts from recent subdivision construction and construction of Old Airport Road
3	C. Petro	0.38	Vol. 2345, page 1074	Surface and judgmental subsurface investigations within proposed ROW when ROE is available
4	K. and P. Wessel	0.12	Vol. 1716, page 666	No further work recommended due to previous impacts from land use (residence) and construction of Old Airport Road
5	S. and K. Malley	0.03	Vol. 2520, page 1429	No further work recommended due to previous impacts from land use (residence) and construction of Old Airport Road

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If it is determined that TxDOT requires additional easements or work space for the proposed construction, then additional archeological investigations would be necessary in those areas. In the event that previously unidentified cultural materials are discovered during construction, work in the immediate area of discovery would cease and the TxDOT archeological staff would be contacted to initiate accidental discovery procedures in accordance with the aforementioned PA-TU and MOU. No artifacts were collected during the current survey. Project records and a copy of the final report will be curated at CAR.

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APPENDIX A

BACKHOE TRENCH DESCRIPTIONS

Backhoe Trench 1

Zone	Depth (cm)	Description
I	0–37	Dark yellowish-brown (10YR 3/4); fine sandy loam, dry, hard and; blocky, common pea gravels (about 15% by volume), insect and worm casts; abundant roots and root disturbances; clear and wavy lower boundary; no artifacts.
II	37–52	Dark yellowish-brown (10YR6/4) sandy clay loam; dry, hard and blocky; abundant (ca. 40% by volume) gravels (pea size to golf ball size) and calcium carbonate flecks, filaments, and 4 mm masses; inclusions include small pockets of Zone III; abrupt and irregular lower boundary; no artifacts.
III	52–150	White (10YR 8/1) fine sand; massive; dry and hard; cemented with calcium carbonate; matrix becomes very loose when disturbed and cracks formed in walls of trench; trench abandoned at 150 cm, due to slumping; this is an anomalous stratum; lower boundary not observed; no artifacts.

Backhoe Trench 2

Zone	Depth (cm)	Description
I	0–28	Gray (7.5 YR 5/1) sandy clay loam; dry and very hard; blocky; common calcium carbonate flecks; heavy root and insect disturbances; clear and smooth lower boundary; no artifacts.
II	28–50	Strong brown (7.5YR 4/6) sandy clay; dry, hard, and blocky; abundant calcium carbonate filaments and flecking; abundant root and insect disturbances; clear and smooth lower boundary; no artifacts.
III	50–77	Pinkish-gray (7.5YR 6/2) sandy clay loam; dry, hard, and blocky; common vertical cracks, calcium carbonate flecks and occasional masses; gradual and smooth lower boundary; no artifacts.
IV	77–150	Brown (7.5YR 4/2) sandy clay subsoil; dry, very hard, and blocky; abundant calcium carbonate flecks, filaments, and nodules; gradual and smooth lower boundary; no artifacts.
V	150–200	Black (10YR 2/1) silt clay subsoil; very dry, very hard, and blocky; common calcium carbonate filaments; lower boundary not observed; no artifacts.

Backhoe Trench 3

Zone	Depth (cm)	Description
I	0–26	Brown (10YR5/3); sandy clay; dry, very hard, and blocky; abundant root, worm, and insect disturbances; few calcium carbonate flecks; diffuse and broken lower boundary; no artifacts.
II	26–87	Light yellowish-brown (10YR 6/4) sandy clay loam subsoil; dry, hard, and blocky; abundant root, worm, and insect disturbances; few calcium carbonate flecks; abrupt and smooth lower boundary; no artifacts.
III	87–175	Very dark grayish-brown (10YR 3/2) sandy clay subsoil; very dry, hard, and platy; abundant calcium carbonate filaments and flecks 0 to 100 centimeters; from 100 centimeters to 175 centimeters calcium carbonate nodules occur; insect and root disturbances common; lower boundary not observed; no artifacts.

Backhoe Trench 4

Zone	Depth (cm)	Description
I	0–84	Yellowish-brown (10YR 5/4) sandy clay loam; dry, hard, and blocky; abundant roots and common calcium carbonate flecks; diffuse and smooth lower boundary; no artifacts.
II	84–160	Dark brown (10YR 3/3) silt clay; dry, hard, and blocky; common calcium carbonate flecks and occasional nodules; diffuse and smooth lower boundary; no artifacts.
III	160–217	Light olive brown (2.5Y 5/3) clay; very dry, very hard, and blocky; common calcium carbonate nodules; lower boundary not observed; no artifacts.

Backhoe Trench 5

Zone	Depth (cm)	Description
I	0–47	Very dark grayish-brown (10YR 3/2) silt clay; dry, hard and; blocky, abundant calcium carbonate flecking and few gravels (pea size to golf ball size); diffuse and smooth lower boundary; no artifacts.
II	47–150	Black (10YR 2/1) silt clay; extremely dry and extremely hard, and blocky; abundant calcium carbonate nodules (up to 2 cm diameter); diffuse and smooth lower boundary; no artifacts; similar to dark clay observed in BHTs 1–3 west of Burgess Creek.
III	150–200	Yellowish-brown (10YR 5/4) sandy clay; very dry, hard, and blocky; abundant pea gravels (approximately 30% by volume); calcium carbonate nodules (up to 2 cm diameter) abundant; lower boundary not observed; no artifacts.

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cultural materials